REMARKS/ARGUMENTS

Claims 1-32 are pending. Claims 5-7 are allowed. Claims 14 and 20 have been amended. In view of the following, all of the claims are in condition for allowance. If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a teleconference with the Applicant's attorney to further the prosecution of the application.

Rejection of claims 1-4, 8-13, 25-28 and 32 under §102(b) as being anticipated by Patapoutian et al. (US 5,661,760)

Claim 1

Claim 1 recites a servo wedge located at the beginning of a disk sector and operable without a zero-frequency field to identify the sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector.

For example, referring, *e.g.*, to FIGS. 4 and 6 and paragraphs 22, 31, 34-52 and 54 of the present application, a servo wedge 22 includes a preamble 74, a servo synchronization mark (SSM) 76, head-location identifier 78 and bursts 84a-84n. A servo circuit 30 exploits the properties of a sinusoid to detect the preamble 74, searches for the SSM 76 within a predetermined time window, and then recovers the location identifier 78 which a head-position circuit 214 uses to determine an initial position of a read-write head 32. In this way, the direct detection of a first servo wedge 22 provides both an initial head position on disk spin-up and a head position during a read or write operation without the use of a zero-frequency field. As a result, the disk's data-storage capacity can be increased by reducing the number of, or altogether eliminating, spin-up servo wedges.

Patapoutian, on the other hand, does not disclose a servo wedge located at the beginning of a disk sector and operable without a zero-frequency field to identify the sector in conjunction with an initial positioning of a read-write head and a read of the data from or write of the data to the disk sector. Instead, Patapoutian discloses servo wedges 68 each having an optional DC erase field 731 (FIG. 4; col. 6, lines 47-53). The DC erase field 731 is considered optional simply because not every servo wedge

68 must have a DC erase field. However, it is well known in the art that at least one or more of the servo wedges 68 must have a DC erase field 731 for the initial positioning of the read-write head 26 on spin-up of the disk 16. A similar prior art disk utilizing both servo wedges and spin-up servo wedges is disclosed in FIGS. 2-3 of the present application. After reviewing Patapoutian in its entirety, the Applicant's attorney is unable find any mention of a servo wedge without a DC erase field (or zero-frequency field) that is operable to identify a disk sector in conjunction with an initial positioning of a read-write head upon spin-up of the disk. There is simply no mention in Patapoutian of any means of identifying a disk sector without the use of a zero-frequency field during an initial positioning of the read-write head upon spin-up of the disk. Therefore, Patapoutian does not satisfy the limitations of claim 1.

Claims 3, 8, 25 and 32

Claims 3, 8, 25 and 32 are patentable for reasons similar to those recited above in support of the patentability of claim 1.

Claims 2, 4, 9-13 and 26-28

Claims 2, 4, 9-13and 26-28 are patentable by virtue of their respective dependencies from independent claims 1, 3, 8 and 25.

Rejections of claims 14-24 and 29 under §102(b) as being anticipated by Tuttle et al. (US 6,108,151)

Claim 14

Claim 14, as amended, recites a processor operable to detect one of the servo wedges without a zero-frequency field while or after the disk attains an operating speed but before the servo channel recovers servo data from any other of the servo wedges.

For example, referring, *e.g.*, to FIGS. 4 and 6 and paragraphs 22, 31, 34-52 and 54 of the present application, a servo wedge 22 includes a preamble 74, a servo synchronization mark (SSM) 76, head-location identifier 78 and bursts 84a-84n. A servo circuit 30 exploits the properties of a sinusoid to detect the preamble 74, searches for the SSM 76 within a predetermined time window, and then recovers the

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location identifier 78 which a head-position circuit 214 uses to determine an initial position of a read-write head 32. In this way, the direct detection of a first servo wedge 22 provides initial head position on disk spin-up without the use of a zero-frequency field and before servo data is recovered from any other of the servo wedges.

Tuttle, on the other hand, does not disclose a processor operable to detect one of the servo wedges without a zero-frequency field while or after the disk attains an operating speed but before the servo channel recovers servo data from any other of the servo wedges. Instead, Tuttle specifically states that a special sequence of bits (long sequence of "0" bits) is recorded in at least one of the servo wedges, and that this zero-frequency field must first be detected before the read channel can locate and acquire the remaining servo wedges (col. 15, lines 19-30). Therefore, Tuttle does not satisfy the limitations of claim 14.

Claim 20

Claim 20, as amended, is patentable for reasons similar to those recited above in support of the patentability of claim 14.

Claims 15-19 and 21-24

Claims 15-19 and 21-24 are patentable by virtue of their respective dependencies from independent claims 14 and 20.

Claim 29

Claim 29 recites a first servo wedge without a zero-frequency spin-up field and including first servo data that is operable to identify a first disk sector during an initial positioning of a head. Claim 29 is patentable for reasons similar to those recited above in support of the patentability of claim 14.

CONCLUSION

In light of the foregoing, claims 1-32 are in condition for allowance, which is respectfully requested.

In the event any fees are due as a result of this amendment, you are hereby authorized to charge such payment to Deposit Account No. 07-1897.

If, after considering this response, the Examiner does not agree that all of the claims are allowable, then it is respectfully requested that the Examiner schedule a phone interview with the Applicant's attorney, J. Mark Han, at (425) 455-5575.

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Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP

J. Mark Han
Attorney for Applicants
Registration No. 57,898
155-108th Avenue N.E., Ste 350
Bellevue, WA 98004-5973
Phone: (425) 455-5575
Fax: (425) 455-1046